INDEX

Covering the Principal Subjects and Articles Which Appeared in Volume 10 of Wire and Wire Products From January to December, 1935, Inclusive.

Acid Cleaning and Material Handling of Rods and Wire ....By Frederick A. Westphal 401
Acid Disposal 410
Acid Handling Methods Lower Pickling Costs ....By J. R. Hoover 407
After N. R. A.—What? ....By Captain Frank W. Bullock 309
Aircraft Cables 95
Aircraft Manufacture—Wire and Cable for 557
Airplane Tie Rods ....By Jack Delmonte 476
Alloy Steels Used in Drawing Wire 469
Annealing Cold Heading Wire 417
Annealing Copper 386
Annealing - History 60
Appraisals in Wire Mill Condemnation Proceedings ....By Burt M. McConnell 465
Association Meeting, 1935—Report 507
Association Membership List—1935 440
Association—The Wire 142-275
Attendance List—1935 Wire Association Meeting 534
Back Pull in Wire Drawing 419
Baking 402
Baking—Rod 181
Bars—Cast Copper 138
Bars—Copper 388
Basic Open Hearth Steel 362
Batch Pickling 408
Bend Test 413
Bend Tester For Vacuum Tube Wires ....By W. J. Farmer 578
Bolt Wire Normalizing 416
Bolts, Nuts, Washers and Rivets Production Figures 1933 23
Bonus Figures CAN Lie ....By K. B. White 12
Braiding—Drop Wires 65
Bridge Model Construction 16
British Institute of Metals Research Papers Digested 590
Cable Improvements in 1934 120
Cable Sheath Testing 267
Cables—Aircraft 95
Cable Used in Aircraft 557
Cap Screw Steel 414
Cascade Drawing of Copper Wire 419
Casting Copper 382
Causes of Labor Difficulties 541
Chromium Wire 469
Cleaning Copper Wire (Q.2106) 318
Cleaning—Early History 60
Cleaning House 67
Cleaning Steel Wire 401
Coating—Early History 59
Coatings for Steel Airplane Wires 477
Coatings—Metallic on Wire 9
Cold Drawing and Annealing Copper 391
Cold Heading Machine 106
Cold Heading Wire ....By L. D. Seymour 414
Cold Working Ferro Alloy Wire 470
Cold Working of Copper 384
Compensation of Employees 12
Condemnation Proceedings in Wire Mill Case 465
Conductors—Stranding of 93
Continuous Pickling 407
Controls—Variable Speed 68
Copper—Oxygen-Free 514
Copper Wire—Grain Size 375
Copper Wire—Hard and Soft 382
Correlation of the Tensile Strength and Electrical Conductivity of Hard-Drawn Copper Wire With Preferred Orientation ....By Prof. Roy Ward Drier 137-183-230
Copperweld Wire 209
Correlation of Spring-Wire Bending and Torsion Fatigue Tests ....By Prof. E. E. Weibel 560
Corrosion of Ferro-Alloy Wires 470
Cuppy Wire 265
Cutting and Straightening Electrodes 68
Decarburization of Wire (Q.2109) 318
Defects in Copper Wire 139
Density of Copper Wire 231
Deoxidization and Grain Size Control 363
Development of Wire Rope Pumping ....By Percy R. Clark and Lutz F. W. Schropp 19
Die Cocking Elimination (Q.2102) 318
Die Life Affected by Use of Back Pull 419
Die Stresses and Die Wear ....By Kenneth B. Lewis 316
Dies—Diamond 194-270
Dies—Early History 59-60
Dies for Locking Wires 228
Dies for Low Carbon Heading Wire 416
Disposal of Spent Acid 409
Drawing Copper Wire 137-183-230
Drawing Wire Shapes ....By Richard Saxton 227
Drawing Wire—Single and Multiple Drafting 71
Drop Wires—Manufacture of 64
Effect of Heavy Oils and Greases on the Fatigue Strength of Steel Wire ....By R. Goodacre 473
Effect on the Physical Properties of Bending Copper Wires of Different Grain Sizes ....By L. B. Barker and C. A. Bailey 375
Electrical Conductivity of Hard-Drawn Copper Wire 137-183-230
Electrodes—Welding 68
Electrolytic Copper 514
Electrolytic Pickling 408
Embrittlement of Low Carbon Steel, The ....By Prof. F. C. Lea and R. N. Arnold 147
Embrittlement—Hydrogen in Rods 114
Employee Rating Plans 521
English Wire Industry—Historical 14
Experiments in Ready-to-Solder Wire ....By Burt M. McConnell 313
Exports and Imports 29-74-110-152-197-240-280-326-432-482-529-580
Fatigue in Rope Wire 265
Fatigue Strength of Steel Wire Affected by Heavy Oils and Greases 473
Fatigue Testing of Cable Sheath 267
Fatigue Testing Machine for Wire 272
Ferrous Sulphate and the Lime Tub ....By Merrill E. Leitch 112
Fifteen Generations in the Wire Industry ....By Kenneth B. Lewis 14
Finishes for Cold Heading Wire 415
Forecast of Wire Industry 97
Foreman and Workers Relations 520
Formula for Winding Wire on Drums or Reels 42-151
Galvanized Wire and Wire Products Tests 17
Glazunov Test as Applied to Wire 9
Grain Size—Copper 395
Grain Size Effect on Physical Properties of Bending Copper Wire 375
Grain Size and Its Influence on the Manufacture of Steel Wire ....By B. L. McCarthy 359
Grinder—Roll 96
Grinding Alloy Wires 470
Grinding of Burrs 68
Half Round Shapes—Drawing 229
Handling Acids 407
Hard and Soft Copper Wire ....By R. A. Schatzel 382
Hazards in Wire Mill Operations ..By Richard E. Brown 61
Heat Treating Alloy Wires 469
Heat Treatment of Cold Heading Wire 414
Historical—British Wire Industry 14
Historical—Copper Wire 137
Historical—Diamond Dies 194-270
Historical—Highley, Nehemiah 14
Historical—Story of Wire, The 57-97-141-191
Hot Rolling Copper Bars 390
Hot Working of Copper 384
How to Order Wire ....By J. Kenneth Murray 524
Hydrogen Embrittlement Occurring in the Pickling Solution for Rods ....By William M. Lease, Jr. 114
Imports and Exports 29-74-110-152-197-240-280-326-432-482-529-580
Industrial Relations as Applied to the Wire Industry ....By E. W. Kempton 518
Inhibitor—Action of 67

INDEX

Covering the Principal Subjects and Articles Which Appeared in Volume 10 of Wire and Wire Products From January to December, 1935, Inclusive.

Acid Cleaning and Material Handling of Rods and Wire ....By Frederick A. Westphal 401
Acid Disposal 410
Acid Handling Methods Lower Pickling Costs ....By J. R. Hoover 407
After N. R. A.—What? ....By Captain Frank W. Bullock 309
Aircraft Cables 95
Aircraft Manufacture—Wire and Cable for 557
Airplane Tie Rods ....By Jack Delmonte 476
Alloy Steels Used in Drawing Wire 469
Annealing Cold Heading Wire 417
Annealing Copper 386
Annealing - History 60
Appraisals in Wire Mill Condemnation Proceedings ....By Burt M. McConnell 465
Association Meeting, 1935—Report 507
Association Membership List—1935 440
Association—The Wire 142-275
Attendance List—1935 Wire Association Meeting 534
Back Pull in Wire Drawing 419
Baking 402
Baking—Rod 181
Bars—Cast Copper 138
Bars—Copper 388
Basic Open Hearth Steel 362
Batch Pickling 408
Bend Test 413
Bend Tester For Vacuum Tube Wires ....By W. J. Farmer 578
Bolt Wire Normalizing 416
Bolts, Nuts, Washers and Rivets Production Figures 1933 23
Bonus Figures CAN Lie ....By K. B. White 12
Braiding—Drop Wires 65
Bridge Model Construction 16
British Institute of Metals Research Papers Digested 590
Cable Improvements in 1934 120
Cable Sheath Testing 267
Cables—Aircraft 95
Cable Used in Aircraft 557
Cap Screw Steel 414
Cascade Drawing of Copper Wire 419
Casting Copper 382
Causes of Labor Difficulties 541
Chromium Wire 469
Cleaning Copper Wire (Q.2106) 318
Cleaning—Early History 60
Cleaning House 67
Cleaning Steel Wire 401
Coating—Early History 59
Coatings for Steel Airplane Wires 477
Coatings—Metallic on Wire 9
Cold Drawing and Annealing Copper 391
Cold Heading Machine 106
Cold Heading Wire ....By L. D. Seymour 414
Cold Working Ferro Alloy Wire 470
Cold Working of Copper 384
Compensation of Employees 12
Condemnation Proceedings in Wire Mill Case 465
Conductors—Stranding of 93
Continuous Pickling 407
Controls—Variable Speed 68
Copper—Oxygen-Free 514
Copper Wire—Grain Size 375
Copper Wire—Hard and Soft 382
Correlation of the Tensile Strength and Electrical Conductivity of Hard-Drawn Copper Wire With Preferred Orientation ....By Prof. Roy Ward Drier 137-183-230
Copperweld Wire 209
Correlation of Spring-Wire Bending and Torsion Fatigue Tests ....By Prof. E. E. Weibel 560
Corrosion of Ferro-Alloy Wires 470
Cuppy Wire 265
Cutting and Straightening Electrodes 68
Decarburization of Wire (Q.2109) 318
Defects in Copper Wire 139
Density of Copper Wire 231
Deoxidization and Grain Size Control 363
Development of Wire Rope Pumping ....By Percy R. Clark and Lutz F. W. Schropp 19
Die Cocking Elimination (Q.2102) 318
Die Life Affected by Use of Back Pull 419
Die Stresses and Die Wear ....By Kenneth B. Lewis 316
Dies—Diamond 194-270
Dies—Early History 59-60
Dies for Locking Wires 228
Dies for Low Carbon Heading Wire 416
Disposal of Spent Acid 409
Drawing Copper Wire 137-183-230
Drawing Wire Shapes ....By Richard Saxton 227
Drawing Wire—Single and Multiple Drafting 71
Drop Wires—Manufacture of 64
Effect of Heavy Oils and Greases on the Fatigue Strength of Steel Wire ....By R. Goodacre 473
Effect on the Physical Properties of Bending Copper Wires of Different Grain Sizes ....By L. B. Barker and C. A. Bailey 375
Electrical Conductivity of Hard-Drawn Copper Wire 137-183-230
Electrodes—Welding 68
Electrolytic Copper 514
Electrolytic Pickling 408
Embrittlement of Low Carbon Steel, The ....By Prof. F. C. Lea and R. N. Arnold 147
Embrittlement—Hydrogen in Rods 114
Employee Rating Plans 521
English Wire Industry—Historical 14
Experiments in Ready-to-Solder Wire ....By Burt M. McConnell 313
Exports and Imports 29-74-110-152-197-240-280-326-432-482-529-580
Fatigue in Rope Wire 265
Fatigue Strength of Steel Wire Affected by Heavy Oils and Greases 473
Fatigue Testing of Cable Sheath 267
Fatigue Testing Machine for Wire 272
Ferrous Sulphate and the Lime Tub ....By Merrill E. Leitch 112
Fifteen Generations in the Wire Industry ....By Kenneth B. Lewis 14
Finishes for Cold Heading Wire 415
Forecast of Wire Industry 97
Foreman and Workers Relations 520
Formula for Winding Wire on Drums or Reels 42-151
Galvanized Wire and Wire Products Tests 17
Glazunov Test as Applied to Wire 9
Grain Size—Copper 395
Grain Size Effect on Physical Properties of Bending Copper Wire 375
Grain Size and Its Influence on the Manufacture of Steel Wire ....By B. L. McCarthy 359
Grinder—Roll 96
Grinding Alloy Wires 470
Grinding of Burrs 68
Half Round Shapes—Drawing 229
Handling Acids 407
Hard and Soft Copper Wire ....By R. A. Schatzel 382
Hazards in Wire Mill Operations ..By Richard E. Brown 61
Heat Treating Alloy Wires 469
Heat Treatment of Cold Heading Wire 414
Historical—British Wire Industry 14
Historical—Copper Wire 137
Historical—Diamond Dies 194-270
Historical—Highley, Nehemiah 14
Historical—Story of Wire, The 57-97-141-191
Hot Rolling Copper Bars 390
Hot Working of Copper 384
How to Order Wire ....By J. Kenneth Murray 524
Hydrogen Embrittlement Occurring in the Pickling Solution for Rods ....By William M. Lease, Jr. 114
Imports and Exports 29-74-110-152-197-240-280-326-432-482-529-580
Industrial Relations as Applied to the Wire Industry ....By E. W. Kempton 518
Inhibitor—Action of 67

Inhibitors ....By Kenneth B. Lewis 236
Inhibitors 402
Iron Carbon Diagram 360
Labor Difficulties 541
Labor in the Wire Industry 193
Labor Turnover 520
Lead Sheet Manufacturing 24
Lime 402
Lime Coat 60
Lime Tub 112
Linings for Pickling Tanks 407
Lock Coil Wires 227
Lubricant for Stainless Steel 540
Lubricants and Fillers for Wire Ropes 473
Lubrication as Affected by Physical Properties of Lubricants ....By Robert C. Williams 145
Lubrication—Early History 59
Machinery—Cold Heading For Use in Combination with Wire Drawing Machine 106
Machines—British Wire Drawing 71
Manufacture of Welding Electrodes, The .... By Francis A. Westbrook 68
Material Handling of Rods and Wire .... By Frederick A. Westphal 401-516
Measuring Productive Capacity of Wire Industry 100-101
Measurements of Copper Wire 183
Membership—Wire Association—1935 440
Metal Combinations for Welding 143
Metallic Coating—Testing 9
Model Construction—Bridge 16
Molybdenum Wire 472
Needle Manufacturing in Germany ....By Fritz Tillman 288
News of the World 31-77-115-157-198-282-329-436-484-531-583
Nickel-Chromium Steel Wire 471
Nickel-Iron Alloy Wires 472
Nickel Steel Wire 471
Notes on the Use of Back Pull in Wire Drawing .... By Paul M. Mueller 419
N. R. A.! Why Did It Fail? 309-310
Nuts—Production Figures 1933 23
Operations—Basic in All Wire Mills 141
Ordering Wire 524
Organization and Trade Groupings in the Wire Industry 141
Outdoor Exposure Tests of Galvanized Wire and Wire Products 17
Oval Wire—Drawing 229
Oxide in Copper 515
Oxygen-Free Copper ....By Henry M. Schleicher 514
Patenting 371
Patenting Temperatures ....By Kenneth B. Lewis 104
Patents 30-75-111-155-196-242-279-328-434-483-528-579
Pension Systems 522
Personalities of the Wire Industry 28-76-152-206-250-278-480-526
Piano Wire Used in Constructing Bridge Models .... By C. W. Geiger 16
Pickling Costs 401-407
Pickling Mild Steel 236
Pickling Solution for Rods, The .... By William M. Lease, Jr. 67
Pickling Steel Wire 401
Plant Capacity in the Wire Industry 192
Plastic Deformation in Wire Drawing 370
Power Requirements for Drawing Copper Wire 421
Pressures in Drawing 228
Program for 1935 Wire Association Meeting 275-276-277
Pumping—Wire Rope For 19
Radio Disturbances Eliminated by Wire Braid Shields 238
Removing Copper or Liquor Finish from Wire (Q.2100) 318
Rimmed vs. Killed Steel 414
Rivets—Production Figures—1933 23
Rod Baking By Direct Fired Recirculation .... By J. R. Morrison 181
Rod Storage 516
Rods—Copper—New Production Methods 138
Rods—Early History 97
Rods—Handling of 401-516
Rods—Hydrogen Embrittlement During Pickling 114
Rods—Pickling 67
Roll Grinder 96
Rolling Hot Copper Bars 390
Rope—800 B. C. 58
Rope—Lubricants and Fillers 473
Rope Wire Cups, Bad Torsion and Fatigue .... By Richard Saxton 265
Rope—Wire Rope For Pumping 19
'Round the World With the Wire Industry 31-32-77-115-157-198-282-329-436-484-531-583
Rubber Compound Deterioration 64
Rustless Iron Wire 470
Safety Devices in Wire Mills 61
Safety Policies 519
Sales Stimulators ....By C. W. Geiger 148
Selling in Egypt ....By Walter Buchler 479
Shapes—Wire Drawing 227
Sheet Lead Manufacturing 24
Shielding By Wire Braid ....By Jack Delmonte 238
Solder Wire 313
Special Steels in Wire Form ....By Richard Saxton 469
Spools for Barbed Wire (Q.2110) 318
Spot Welding ....By Lawrence Ferguson 143
Spring Wire Bending and Torsion Fatigue Tests 560
Square Wire Drawing 228
Stainless Steel Lubricant 540
Standards—Labor and Machine for Compensation Determination 12
Statistical Picture of American Wire Markets 98-99
Steel—Embrittlement of Low Carbon 147
Steel Wire—Grain Size Effect in Manufacture 359
Story of Wire, The .... By Captain Frank W. Bullock 57-97-141-191
Stranded Conductors 238
Stranding of Conductors ....By Jack Delmonte 95
Stresses Which Deform Wire in the Die 316
Suggestion Systems 523
Sull Coat 60
Tanks—Welded Steel for Pickling 407
Telephone Wire—Weatherproofing of 64
Temperatures for Cleaning Wire 401
Temperatures in Alloy Wire Production 470
Temperatures—Grain Coarsening 366
Temperatures—Patenting 104
Tensile Strength of Hard Drawn Copper Wire 137-183-230
Tensile Strength Testing 413
Test—Glazunov 9
Testing—Bend, For Vacuum Tube Wires 578
Testing—Braided Drop Wires 65
Testing Cable Sheath for Fatigue ....By C. H. Greenall 267
Testing and Controlling Metallic Coatings on Wire .... By John H. Hruska 9
Testing Copper Wire 183
Tests and Testing ....By C. A. Kellogg 411
Tests for Cold Heading Wire 415
Tests—Galvanized Wire and Wire Products 17
Tests—Spring Wire Bending and Torsion Fatigue 560
Tie Rods For Airplanes 476
Tool Steel 471
Torsion Test 413
Training of Employees 519
Training Foremen 541
Tubs and Vats—Acid 404
Tungsten Carbide—Used 325
Uses of Wire—General 57
Vacuum Tube Wires—Bend Testing 578
Ventilating Systems for Pickling Rooms 409
Washers—Production Figures—1933 23
Weatherproofing—Drop Wires 65
Weatherproofing of Telephone Wires ....By W. J. Lally 64
Welding—Combinations of Metals 143
Welding Electrodes 68
Welding—Spot 143
Winding Wire—Formula For 42-151
Wire and Cable in Aircraft Manufacture .... By Richard Rummell 557
Wire Association 142
Wire Association Meeting 1935—Attendance List 534
Wire Association Meeting 1935—Report of 507
Wire Association Membership List—1935 440
Wire Association Program 1935 Meeting 427-31
Wire Drawing—Single and Multiple Drafting .... By Richard Saxton 71
Wire—The Story of 57
Wires—Vacuum Tube 578